

## **ABSTRACT**

The present invention is directed to a fiber, preferably bone fiber, having a textured surface, which acts as an effective binding substrate for bone-forming cells and for the induction or promotion of new bone growth by bone-forming cells, which bind to the fiber. Methods of using the bone fibers to induce or promote new bone growth and bone material compositions comprising the bone fibers are also described. The invention further relates to a substrate cutter device and cutter, which are effective in producing substrate fibers, such as bone fibers.

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